

ARG63749 anti-beta Arrestin 2 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes beta Arrestin 2
Tested Reactivity	Hu, Ms
Predict Reactivity	Rat
Tested Application	WB
Specificity	This antibody is expected to recognise both reported isoforms NP_004304.1 and NP_945355.1. No crossreactivity is expected with Arrestin beta 1.
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	beta Arrestin 2
Species	Human
Immunogen	C-HDHIPLRPQS
Conjugation	Un-conjugated
Alternate Names	BARR2; Beta-arrestin-2; Arrestin beta-2; ARB2; ARR2

Application Instructions

Application table	Application	Dilution
	WB	0.1 - 1 µg/ml
Application Note	WB: Recommend incubate at RT for 1h. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

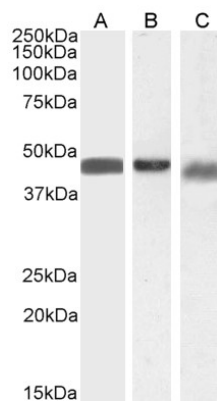
Database links	GeneID: 216869 Mouse GeneID: 409 Human Swiss-port # P32121 Human Swiss-port # Q91YI4 Mouse
Background	Members of arrestin/beta-arrestin protein family are thought to participate in agonist-mediated desensitization of G-protein-coupled receptors and cause specific dampening of cellular responses to stimuli such as hormones, neurotransmitters, or sensory signals. Arrestin beta 2, like arrestin beta 1, was shown to inhibit beta-adrenergic receptor function in vitro. It is expressed at high levels in the central nervous system and may play a role in the regulation of synaptic receptors. Besides the brain, a cDNA for arrestin beta 2 was isolated from thyroid gland, and thus it may also be involved in hormone-specific desensitization of TSH receptors. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2012]
Research Area	Signaling Transduction antibody
Calculated Mw	46 kDa
PTM	Phosphorylated at Thr-382 in the cytoplasm; probably dephosphorylated at the plasma membrane. The phosphorylation does not regulate internalization and recycling of ADRB2, interaction with clathrin or AP2B1. The ubiquitination status appears to regulate the formation and trafficking of beta-arrestin-GPCR complexes and signaling. Ubiquitination appears to occur GPCR-specific. Ubiquitinated by MDM2; the ubiquitination is required for rapid internalization of ADRB2. Deubiquitinated by USP33; the deubiquitination leads to a dissociation of the beta-arrestin-GPCR complex. Stimulation of a class A GPCR, such as ADRB2, induces transient ubiquitination and subsequently promotes association with USP33. Stimulation of a class B GPCR promotes a sustained ubiquitination. Hydroxylation by PHD2 modulates the rate of internalization by slowing down recruitment to the plasma membrane and inhibiting subsequent co-internalization with class A receptors.

Images



ARG63749 anti-beta Arrestin 2 antibody WB image

Western blot: Human Brain lysate (35 µg protein in RIPA buffer) stained with ARG63749 anti-beta Arrestin 2 antibody at 0.3 µg/ml dilution.



ARG63749 anti-beta Arrestin 2 antibody WB image

Western blot: 35 µg of Human spleen (A), Mouse brain (B) and Mouse spleen (C) lysates (in RIPA buffer) stained with ARG63749 anti-beta Arrestin 2 antibody at 0.1 µg/ml (A) and 1 µg/ml (B, C) dilutions and incubated at RT for 1 hour.